

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	30320/15121
	First Inventor	Michael A. Brown
	Title	METHODS AND APPARATUS FOR DETERMINING THE STATE OF A VARIABLE RESISTIVE LAYER IN A MATERIAL STACK
	Express Mail Label No.	EV323777065US
	INTEL Reference	P-15121

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents.		<b>ADDRESS TO:</b> MS Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original, and a duplicate for fee processing)</i>	7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program <i>(Appendix)</i>	<b>ACCOMPANYING APPLICATIONS PARTS</b> 9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of <i>(when there is an assignee)</i> Attorney 11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i> 12. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Statement (IDS)/PTO-1449 Citations 13. <input type="checkbox"/> Preliminary Amendment 14. <input type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i> 15. <input type="checkbox"/> Certified Copy of Priority Document(s) <i>(if foreign priority is claimed)</i> 16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. <input type="checkbox"/> Other: <input type="text"/>	
2. <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.	8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i> a. <input type="checkbox"/> Computer Readable Form (CRF) b. Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> Paper c. <input type="checkbox"/> Statements verifying identity of above copies		
3. <input checked="" type="checkbox"/> Specification [Total Pages <b>33</b> ] <i>(preferred arrangement set forth below)</i> - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings <i>(if filed)</i> - Detailed Description - Claim(s) - Abstract of the Disclosure			
4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <b>7</b> ]			
5. Oath or Declaration [Total Sheets <input type="text"/> a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) <i>(for continuation/divisional with Box 18 completed)</i> i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).			
6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76			

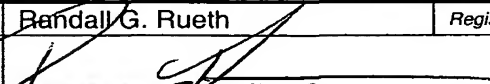
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_

**For CONTINUATION or DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

<b>19. CORRESPONDENCE ADDRESS</b>					
<input checked="" type="checkbox"/> Customer Number or Bar Code Label		04743		or <input checked="" type="checkbox"/> Correspondence address below	
Name	MARSHALL, GERSTEIN & BORUN LLP Randall G. Rueth				
Address	233 S. Wacker Drive, Suite 6300 Sears Tower				
City	Chicago	State	IL	Zip Code	60606-6357
Country	US	Telephone	(312) 474-6300	Fax	(312) 474-0448

Name (Print/Type)	Randall G. Rueth	Registration No. (Attorney/Agent)	45,887
Signature		Date	July 28, 2003

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV323777065US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: July 28, 2003

Signature: Laura Fraser (Laura Fraser)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">for FY 2003</h3> <p style="font-size: small; margin: 0;">Effective 01/01/2003. Patent fees are subject to annual revision.</p>		<b>Complete if Known</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	
		Filing Date	
		First Named Inventor	
		Examiner Name	
		Art Unit	
<b>TOTAL AMOUNT OF PAYMENT</b>		(\$ ) 1,242.00	
		Attorney Docket No.	
		INTEL Reference	

<b>METHOD OF PAYMENT (check all that apply)</b> <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None <input type="checkbox"/> Deposit Account Deposit Account Number: <span style="border: 1px solid black; padding: 2px;">13-2855</span> Deposit Account Name: <span style="border: 1px solid black; padding: 2px;">MARSHALL, GERSTEIN &amp; BORUN LLP</span> The Director is hereby authorized to: (check all that apply) <input type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input checked="" type="checkbox"/> Charge any additional fee(s) during the pendency of this application <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	<b>FEE CALCULATION (continued)</b> <b>3. ADDITIONAL FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>1252</td><td>410</td><td>2252</td><td>205</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253</td><td>930</td><td>2253</td><td>465</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1254</td><td>1,450</td><td>2254</td><td>725</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255</td><td>1,970</td><td>2255</td><td>985</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401</td><td>320</td><td>2401</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402</td><td>320</td><td>2402</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>1403</td><td>280</td><td>2403</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1451</td><td>1,510</td><td>1451</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1453</td><td>1,300</td><td>2453</td><td>650</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1501</td><td>1,300</td><td>2501</td><td>650</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>1502</td><td>470</td><td>2502</td><td>235</td><td>Design issue fee</td><td></td></tr> <tr><td>1503</td><td>630</td><td>2503</td><td>315</td><td>Plant issue fee</td><td></td></tr> <tr><td>1460</td><td>130</td><td>1460</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>1806</td><td>180</td><td>1806</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>1809</td><td>750</td><td>2809</td><td>375</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>1810</td><td>750</td><td>2810</td><td>375</td><td>For each additional invention to be examined (37CFR 1.129(b))</td><td></td></tr> <tr><td>1801</td><td>750</td><td>2801</td><td>375</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>1802</td><td>900</td><td>1802</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="4">Other fee (specify)</td> <td></td> <td></td> </tr> <tr> <td colspan="4">*Reduced by Basic Filing Fee Paid</td> <td><b>SUBTOTAL (3)</b></td> <td>(\$ ) 0.00</td> </tr> </tbody> </table>	Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	65	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	110	2251	55	Extension for reply within first month		1252	410	2252	205	Extension for reply within second month		1253	930	2253	465	Extension for reply within third month		1254	1,450	2254	725	Extension for reply within fourth month		1255	1,970	2255	985	Extension for reply within fifth month		1401	320	2401	160	Notice of Appeal		1402	320	2402	160	Filing a brief in support of an appeal		1403	280	2403	140	Request for oral hearing		1451	1,510	1451	1,510	Petition to institute a public use proceeding		1452	110	2452	55	Petition to revive - unavoidable		1453	1,300	2453	650	Petition to revive - unintentional		1501	1,300	2501	650	Utility issue fee (or reissue)		1502	470	2502	235	Design issue fee		1503	630	2503	315	Plant issue fee		1460	130	1460	130	Petitions to the Commissioner		1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		1806	180	1806	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)		1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))		1810	750	2810	375	For each additional invention to be examined (37CFR 1.129(b))		1801	750	2801	375	Request for Continued Examination (RCE)		1802	900	1802	900	Request for expedited examination of a design application		Other fee (specify)						*Reduced by Basic Filing Fee Paid				<b>SUBTOTAL (3)</b>	(\$ ) 0.00
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																										
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																												
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																																																											
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																											
1053	130	1053	130	Non-English specification																																																																																																																																																																																											
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																																																											
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																											
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																											
1251	110	2251	55	Extension for reply within first month																																																																																																																																																																																											
1252	410	2252	205	Extension for reply within second month																																																																																																																																																																																											
1253	930	2253	465	Extension for reply within third month																																																																																																																																																																																											
1254	1,450	2254	725	Extension for reply within fourth month																																																																																																																																																																																											
1255	1,970	2255	985	Extension for reply within fifth month																																																																																																																																																																																											
1401	320	2401	160	Notice of Appeal																																																																																																																																																																																											
1402	320	2402	160	Filing a brief in support of an appeal																																																																																																																																																																																											
1403	280	2403	140	Request for oral hearing																																																																																																																																																																																											
1451	1,510	1451	1,510	Petition to institute a public use proceeding																																																																																																																																																																																											
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																																																											
1453	1,300	2453	650	Petition to revive - unintentional																																																																																																																																																																																											
1501	1,300	2501	650	Utility issue fee (or reissue)																																																																																																																																																																																											
1502	470	2502	235	Design issue fee																																																																																																																																																																																											
1503	630	2503	315	Plant issue fee																																																																																																																																																																																											
1460	130	1460	130	Petitions to the Commissioner																																																																																																																																																																																											
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																																											
1806	180	1806	180	Submission of Information Disclosure Stmt																																																																																																																																																																																											
8021	40	8021	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																											
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																											
1810	750	2810	375	For each additional invention to be examined (37CFR 1.129(b))																																																																																																																																																																																											
1801	750	2801	375	Request for Continued Examination (RCE)																																																																																																																																																																																											
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																																																											
Other fee (specify)																																																																																																																																																																																															
*Reduced by Basic Filing Fee Paid				<b>SUBTOTAL (3)</b>	(\$ ) 0.00																																																																																																																																																																																										

<b>SUBMITTED BY</b>		<b>Complete (if applicable)</b>	
Name (Print/Type)	Registration No. (Attorney/Agent)	Telephone	Date
Randall G. Rueth	45,887	(312) 474-6607	July 28, 2003
Signature		Date	

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV323777065US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: July 28, 2003      Signature: Laura Fraser (Laura Fraser)